

CLEAN VERSION OF PENDING CLAIMS

1. An aptamer having a length of between 12 and 22 nucleic acid units, inclusive, and having a sequence which includes at least two G-rich regions selected from the group consisting of GGnG, GGGG, GnGG, nGGG and GGGn, where G is guanidine and n is any nucleotide, and wherein the aptamer reduces CD28 expression in an activated human T-cell.
2. The aptamer of claim 1 wherein at least two of the at least two regions are separated by two to seven nucleotides, inclusive.
3. The aptamer of claim 1 wherein at least two of the at least two regions are separated by three to six nucleotides, inclusive.
4. The aptamer of claim 1 wherein at least two of the at least two regions are separated by four nucleotides.
5. Previously canceled.
6. The aptamer of claim 1 wherein the aptamer competes for a nucleic acid binding site of SP1.
7. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GGnG, and at least two of the at least two regions are separated by two to seven nucleotides.
8. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GGGG, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.
9. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises GnGG, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.
10. The aptamer of claim 1 which competes for a nucleic acid binding site of an immune regulatory protein, wherein at least one of the at least two G-rich regions comprises nGGG or

GGGn, and at least two of the at least two regions are separated by two to seven nucleotides, inclusive.

11. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GTG GTG GGG. 3' (Seq. Id. No. 4).
12. The aptamer of claim 1 comprising the sequence 5' GGG GAG GAG GGG CTG GAA 3' (Seq. Id. No. 5).
13. The aptamer of claim 1 comprising the sequence 5' GGG GTG GTG GGG 3' (Seq. Id. No. 13).
14. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GAG GAG GGG 3' (Seq. Id. No. 7).
15. The aptamer of claim 1 comprising the sequence 5' TTG GAG GGG GAG GTG GGG 3' (Seq. Id. No. 8).
16. The aptamer of claim 1 comprising the sequence 5' GGG TTG GAG GGG GTG GTG GGG 3' (Seq. Id. No. 6).
17. A method of medicating an immunocompetent cell, comprising administering to the cell an aptamer according to claim 1 at a concentration effective to reduce CD28 expression.
18. Previously canceled.
19. The method of claim 17 wherein the immunocompetent cell is in a patient suffering from a graft vs host response.
20. The method of claim 17 wherein the immune competent cell is in a patient suffering from an autoimmune disease.
21. The method of claim 20 wherein the autoimmune disease comprises rheumatoid arthritis.
22. The method of claim 20 wherein the autoimmune disease multiple sclerosis.
23. The method of claim 20 wherein the autoimmune disease comprises lupus erythematosus.

24. The method of claim 20 wherein the autoimmune disease comprises insulin dependent diabetes mellitus.

25. The method of claim 20 wherein the autoimmune disease comprises psoriasis.